

### Weekly Influenza Summary:

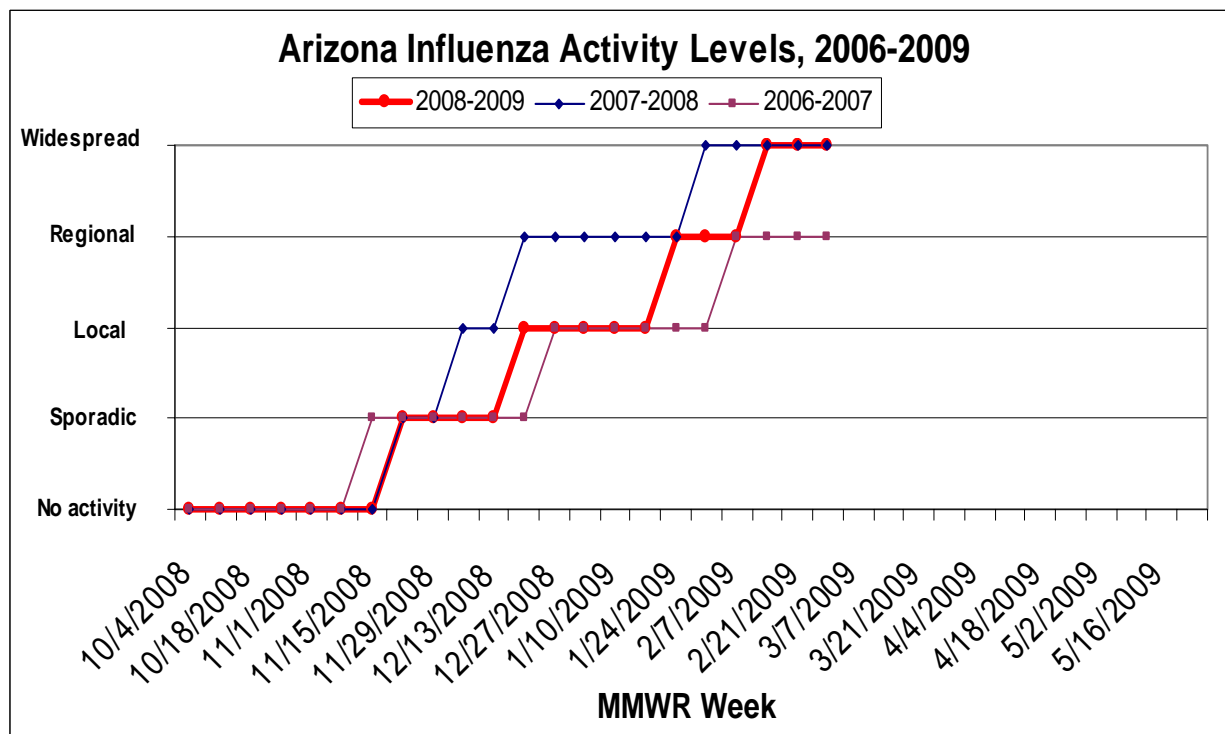
As of 3/3/2009, a total of 563 laboratory-confirmed cases of influenza were reported to ADHS for the 2008-09 season, and Arizona is reporting widespread influenza activity to CDC for the week ending 2/28/2009. Almost 200 lab-confirmed cases were reported this past week. Cases have been reported from fourteen counties (Apache, Cochise, Coconino, Gila, Graham, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, and Yuma). The influenza-like-illness rate is higher than the state baseline for week 7. One influenza-associated pediatric death has been reported to ADHS for the current season.

Data in this report are provisional and may change as more reports are received.

National influenza surveillance data are available at the CDC's Influenza Surveillance site (<http://www.cdc.gov/flu/weekly/fluactivity.htm>).

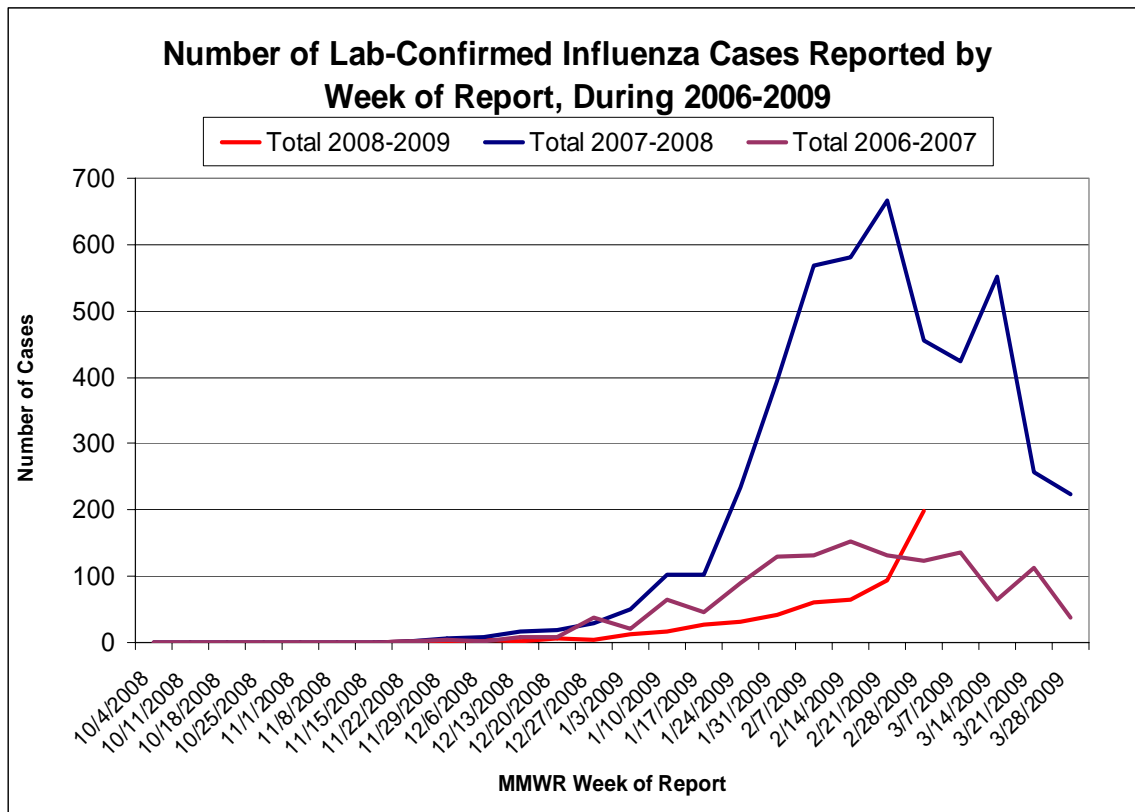
### Arizona Influenza Activity Levels:

The graph below shows the influenza activity levels reported to the CDC for this season only. For week 8, Arizona reported widespread activity. Definitions of these reporting categories can be found at Definitions: <http://www.cdc.gov/flu/weekly/fluactivity.htm>.



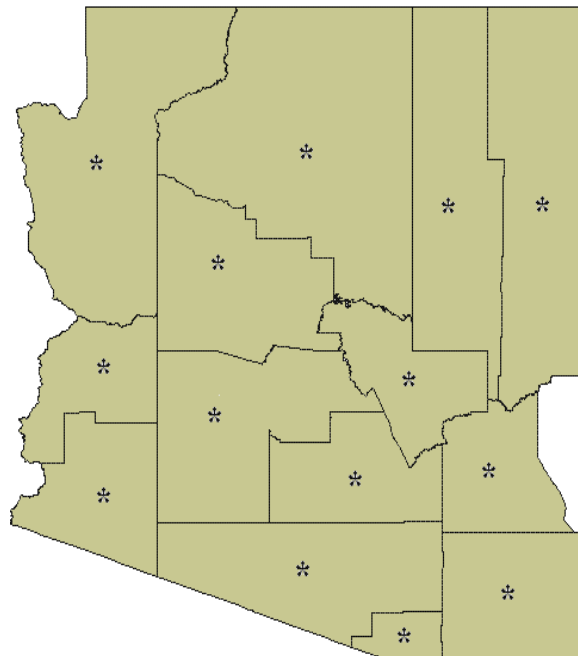
### Laboratory-Confirmed Influenza Activity by Season [2006-2009]:

Arizona laboratories report positive influenza tests to ADHS. The positive cases are counted by the date of report to ADHS.



### Laboratory-Confirmed Influenza Activity by County:

Arizona laboratories report positive influenza tests to ADHS. The positive cases are counted by the county of residence.



#### Key:

\* = Any activity reported this season

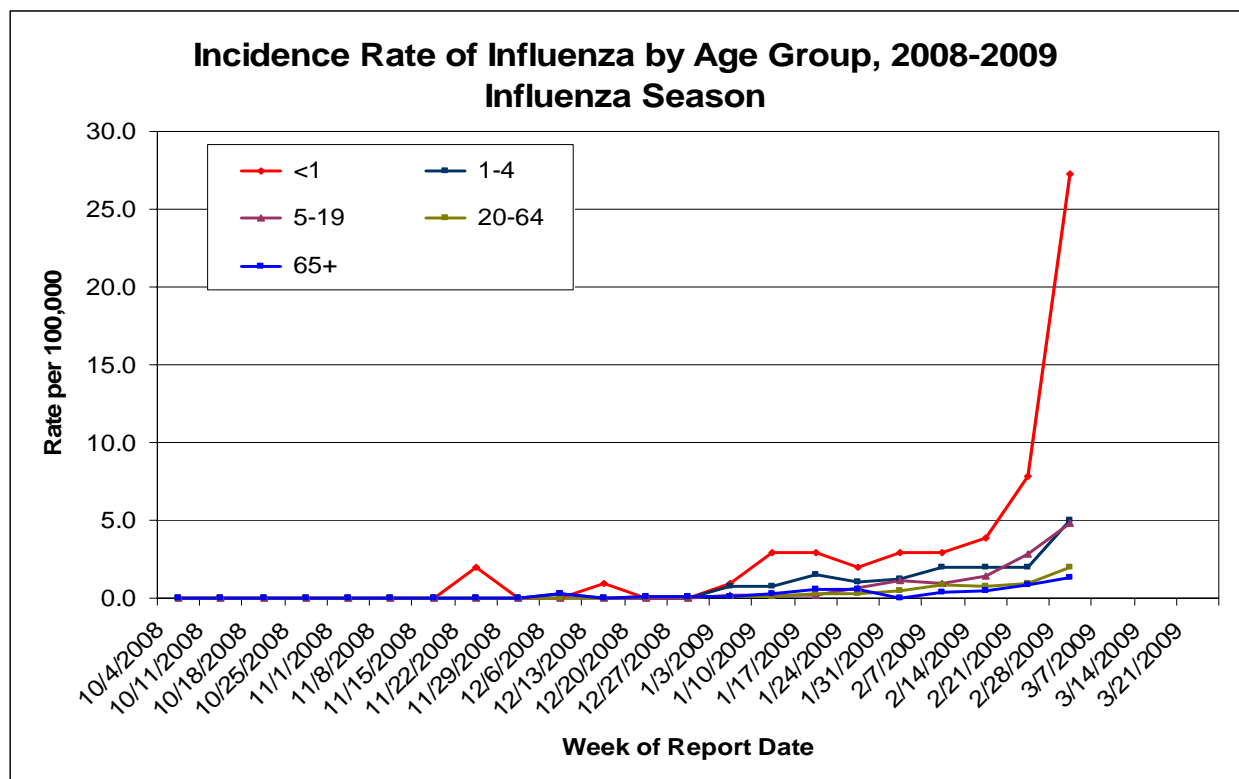
**Green** = Activity reported in the previous three weeks

**White** = No activity reported in the previous three weeks

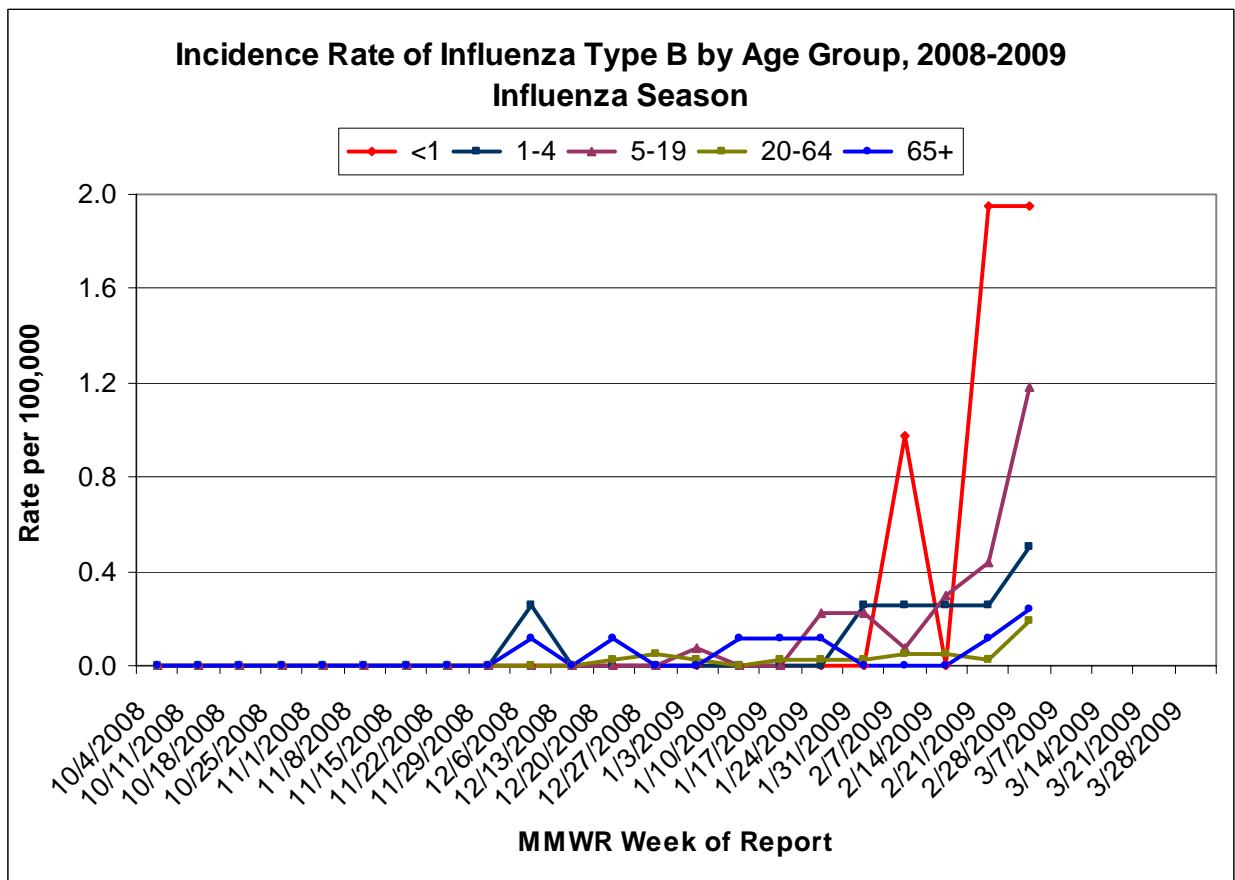
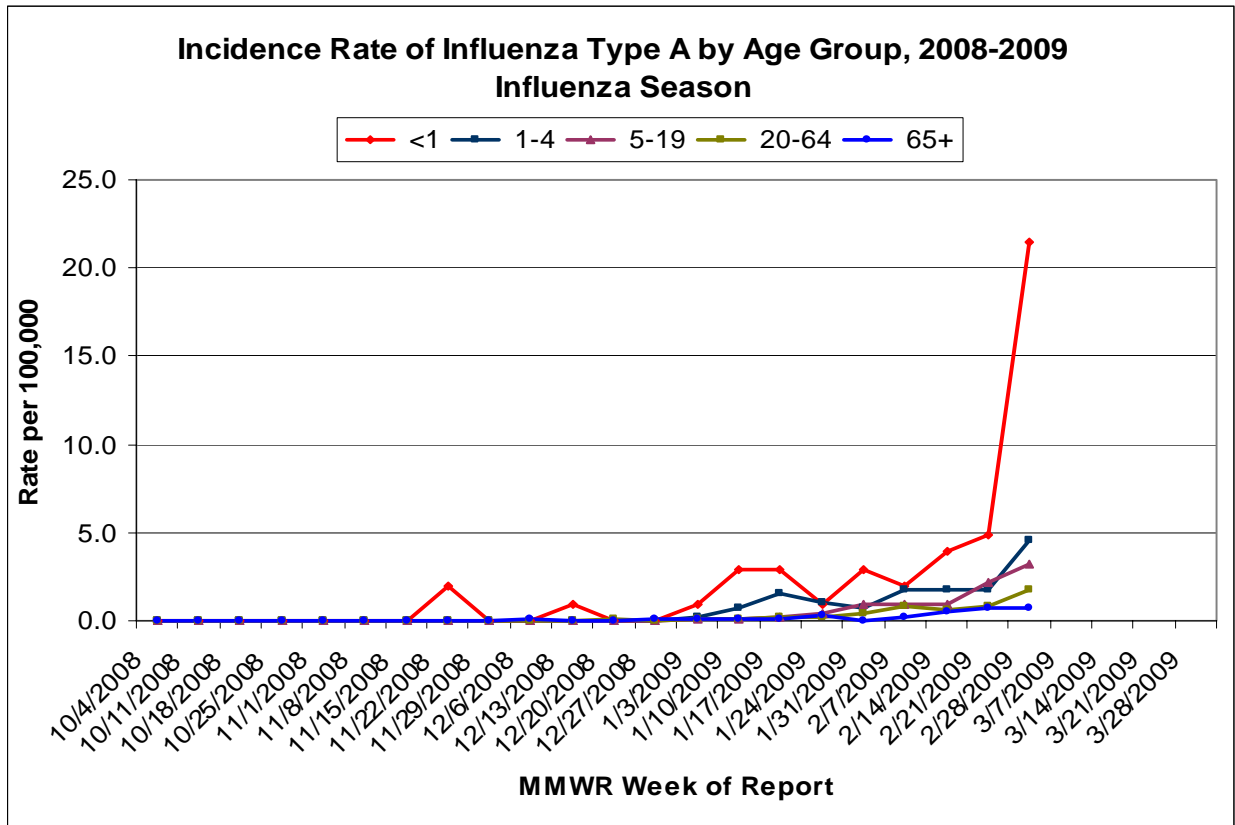
County	Number of Laboratory-Confirmed Cases		
	2008-2009 Season	Last Week	Last 3 Weeks
Apache	21	12	16
Cochise	19	6	7
Coconino	51	20	39
Gila	2	0	1
Graham	9	3	4
Greenlee	0	0	0
La Paz	4	1	3
Maricopa	319	113	206
Mohave	1	0	1
Navajo	16	1	10
Pima	103	35	59
Pinal	11	6	7
Santa Cruz	1	0	1
Yavapai	3	0	2
Yuma	3	1	1
Unknown	0	0	0
<b>Total</b>	<b>563</b>	<b>198</b>	<b>357</b>

### Laboratory-Confirmed Influenza Activity by Age Group:

The graph below shows the rate of lab-confirmed influenza by age for the season.

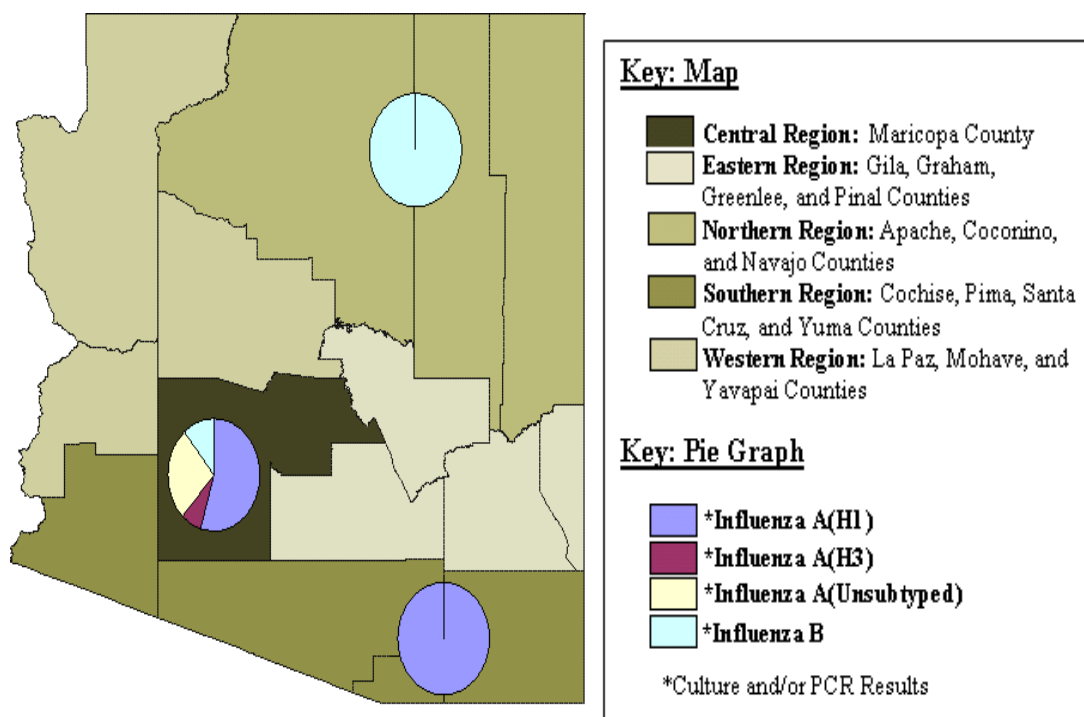


Prior influenza exposure, vaccination, or other factors may affect which age groups are affected by circulating influenza viruses. The graphs below show the rate of reported influenza, by viral type.



## Laboratory Surveillance:

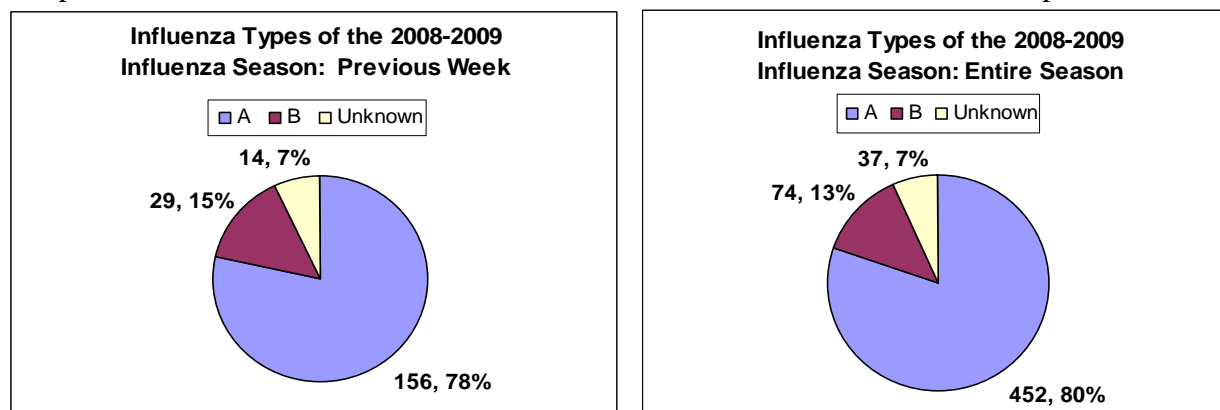
The results below show only culture and/or PCR results reported to ADHS from the Arizona State Laboratory or other laboratories across the state during the previous three weeks or from February 8<sup>th</sup> through the 28<sup>th</sup>.



Region	Influenza A(H1)	Influenza A(H3)	Influenza A(Unsubtyped)	Influenza B
Central	44 (54.3%)	6 (7.4%)	22 (27.2%)	9 (11.1%)
Eastern	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Southern	3 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Northern	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
Western	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Laboratories report positive influenza tests to ADHS. Data are then compiled based on influenza type from all positive laboratory tests.

The pie charts below show all lab-confirmed cases of influenza in the noted time periods.



	Season (2008-2009)	Percent Total (2008-2009)	Season (2007-2008)	Percent Total (2007-2008)	Season (2006-2007)	Percent Total (2006-2007)
<b>Total*</b>	563	100%	5,168	100%	1,663	100%
<b>Influenza A*</b>	452	80%	2,898	56%	1,116	67%
A/H1 †	89	16%	184	4%	235	14%
A/H3 †	19	3%	234	5%	31	2%
A/Unsubtyped †	20	4%	257	5%	185	11%
<b>Influenza B*</b>	74	13%	1900	37%	355	21%
B/Victoria lineage †	5	1%	0	0%	38	2%
B/Yamagata lineage †	0	0%	181	4%	5	1%
B/Unsubtyped †	9	2%	325	6%	120	7%
<b>Unknown*</b>	37	7%	370	7%	192	12%

\* Data for the bolded categories include all tests.

† Data for the subcategories include only culture and PCR tests conducted at the Arizona State Laboratory or other reporting laboratories.

	Arizona† (2008-2009)	Percent Total (2008-2009)	Mountain Region* (2008-2009)	Percent Total (2008-2009)	Nationwide* (2008-2009)	Percent Total (2008-2009)
<b>Total</b>	142	100%	737	100%	11,635	100%
<b>Influenza A</b>	128	90%	683	93%	9,089	78%
A/H1	89	70%	189	28%	2,918	32%
A/H3	19	15%	93	14%	328	4%
A/Unsubtyped	20	15%	401	59%	5,843	64%
<b>Influenza B</b>	14	10%	54	7%	2,546	22%

† Data represent the cumulative results for all culture and PCR tests conducted at the Arizona State Laboratory or other reporting laboratories within the state of Arizona through MMWR 7 or week ending 2/21/2009.

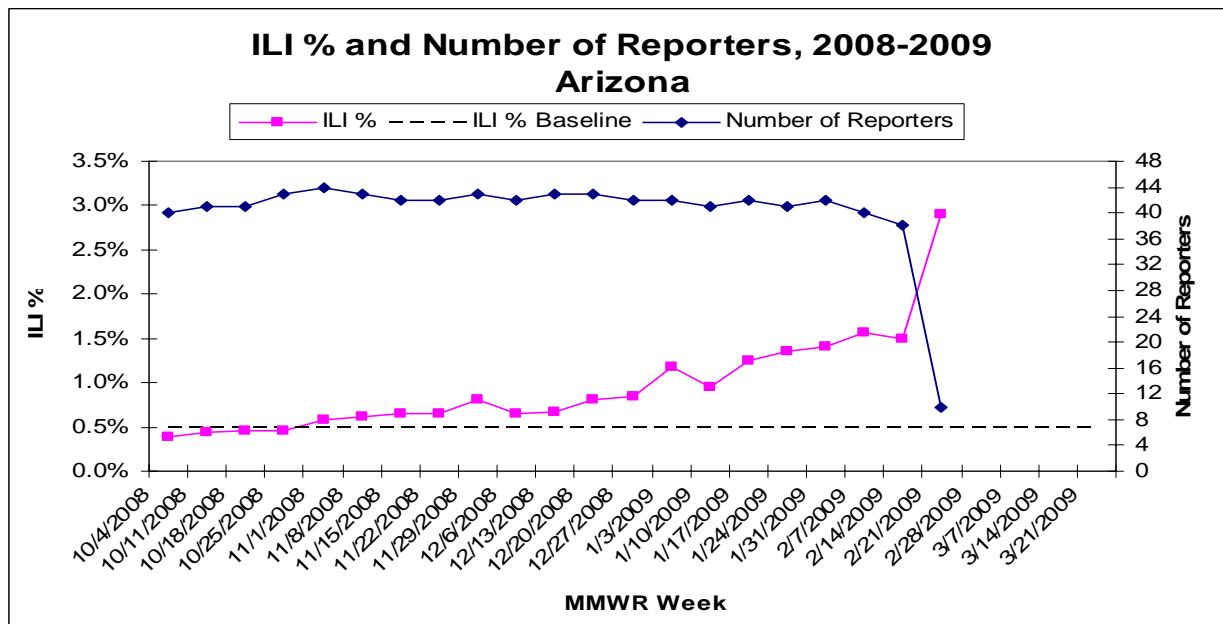
\* Data represents the cumulative results for all identified influenza isolates within the respective category through MMWR 6 or week ending 2/14/2009.

### Mortality Surveillance:

The first influenza-associated pediatric death was reported to ADHS during the 2008-2009 influenza season and was reported to CDC for the week ending 2/21/2009. The case was co-infected with the influenza B virus and *Staphylococcus aureus*.

### Influenza-Like Illness (ILI) Surveillance from Sentinel Providers:

The proportion of patient visits to sentinel providers for ILI in the state was 2.9% for the week ending 2/21/2009 (week 7). This value is much higher than the state baseline of 0.5%. As of 3/3/2009, 10 sentinel providers reported by the end of week 7. Due to the lower number of reporting providers, the noted ILI proportion may not be representative for the entire state of Arizona during week 7. ILI is defined as a fever of at least 100°F plus either a cough or a sore throat.

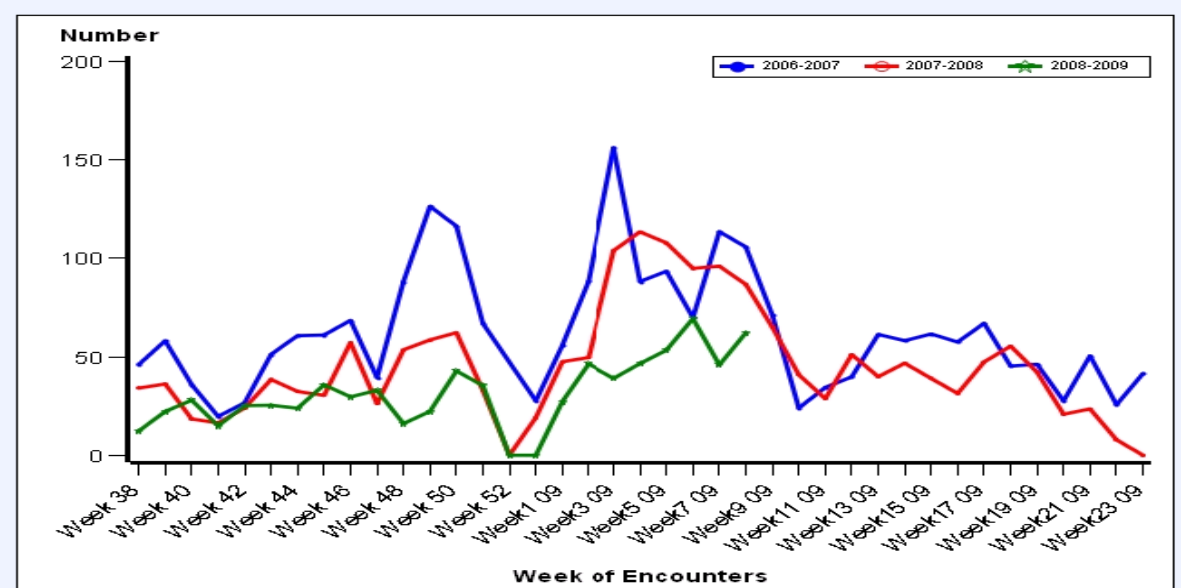


### Influenza-Like Illness (ILI) Surveillance from Participating Arizona Schools:

ADHS and the Arizona School Nurse Consortium (AZSNC) developed and implemented a software program called Child Health Indicator Program (CHIP) to assist school nurses in electronic management of student health records. Currently, nurses in 331 Arizona schools use the software to collect information on student health conditions for 266 nursing diagnosis codes, including influenza-like illness (ILI), rash, and gastrointestinal illness (GI).

The graph presents the weekly trend of ILI syndromes reported among students during the school years of 2006-2007, 2007-2008, and 2008-2009. The number of school nurse encounters are not diagnosed cases of communicable diseases but are based on the nursing codes that school nurses enter to track student conditions. Also, the numbers in the graph are only from schools that used CHIP during the school year.

### Influenza-Like Illness Per School Enrollment in Arizona (per 100,000)

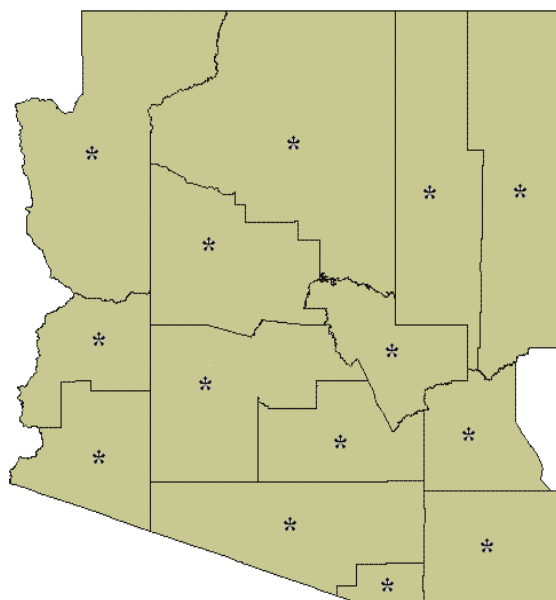


**Weekly RSV Summary:**

As of 2/24/2009, 2,155 lab-confirmed cases were reported to ADHS during the 2008-2009 season.

**Lab-Confirmed RSV Cases Reported by County:**

Since October 2004, laboratories have been required to report positive RSV tests to ADHS.



**Key:**

\* = Any activity reported this season

**Green** = Activity reported in the previous three weeks

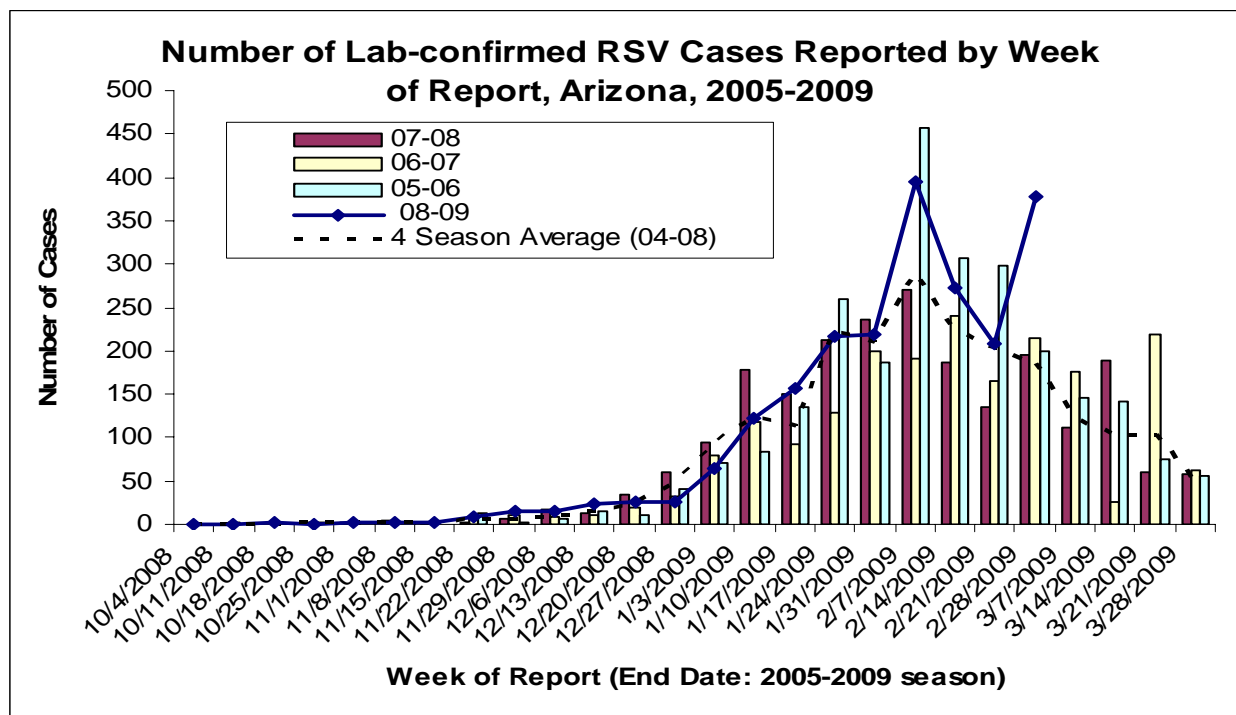
**White** = No activity reported in the previous three weeks

County	Number of Laboratory-Confirmed Cases		
	2008-2009 Season	Last Week	Last 3 Weeks
Apache	40	5	18
Cochise	47	11	18
Coconino	62	10	30
Gila	11	2	8
Graham	5	0	1
Greenlee	0	0	0
La Paz	7	0	1
Maricopa	1504	296	569
Mohave	56	8	25
Navajo	58	8	37
Pima	221	7	58
Pinal	106	24	69
Santa Cruz	7	1	5
Yavapai	8	1	7
Yuma	20	3	11
Unknown	3	2	3
<b>Total</b>	<b>2155</b>	<b>378</b>	<b>860</b>



## Laboratory Surveillance:

Laboratories report positive RSV tests to ADHS.



## Laboratory-Confirmed RSV Activity by Age Group and Week:

